

GenCore version 5.1.6  
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Om protein - protein search, using sw model

Run on: March 7, 2005, 06:55:26 ; Search time 24.409 Seconds

919.008 Million cell updates/sec

Title: US-09-939-537-35

Perfect score: 288

Sequence: 1 PRASALPAPPGSALPDFFQT.....VISFLIGLGLGVACVLRTR 58  
 (without alignments)

Scoring table: BLOSUM62

Gapext 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0  
 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : A\_Geneseq\_15pec04:\*

1: geneseq1980s:\*

2: geneseq2-1990s:\*

3: geneseq2000s:\*

4: geneseq2001s:\*

5: geneseq2002s:\*

6: geneseq2003ab:\*

7: geneseq2003be:\*

8: geneseq2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	288	100.0	58 2	AAR78668 CD7 trans
2	288	100.0	58 2	AAR89440 CD7 trans
3	284	98.6	240 2	AAR20806 Human CD7
4	284	98.6	240 2	Aar91434 Human CD7
5	284	98.6	240 2	Aaw80443 Human CD7
6	284	98.6	240 2	Aaw86190 Human CD7
7	284	98.6	240 3	Aay96129 Human cell
8	284	98.6	240 4	Aau02438 Human cell
9	284	98.6	240 4	Aab36657 Human CD7
10	284	98.6	240 8	Ado9346 Human CD7
11	284	98.6	240 8	Adp55090 Human PRO
12	284	98.6	250 7	Adi60167 Secreted
13	193	67.0	225 8	Adi11080 Human the
14	176	61.1	154 2	Aaw35850 Human CD7
15	83.5	49.5	145 4	Abb71046 Drosophila
16	82	28.5	450 4	Abb71041 Drosophila
17	81.5	28.3	199 4	Aau28370 Novel hum
18	81.5	28.3	199 7	Ado09107 Novel pro
19	81.5	28.3	199 7	Ado09108 Novel pro
20	81	28.1	421 4	Abb67110 Drosophila
21	81	28.1	421 4	Abb61369 Drosophila
22	81	28.1	512 8	Ado09065 Fruit fly
23	80.5	28.0	572 2	Aaw31855 Mycobacte
24	80.5	28.0	763 2	Aaw31852 Mycobacte
25	79.5	27.6	796 7	Ada08003 Human PR

Score	DB ID	Length	Match	Peptide
26	79.5	27.6	796 8	ADJ32183 Human PRM
27	78	27.1	116 4	Aam20321 Peptide #
28	78	27.1	116 4	Abb40803 Peptide #
29	78	27.1	116 4	Aam34569 Peptide #
30	78	27.1	116 4	Abb24592 Protein #
31	78	27.1	116 4	Aam74455 Human bon
32	78	27.1	116 4	AAM61662 Human bra
33	78	27.1	116 4	ABG56348 Human liv
34	78	27.1	482 7	ABG44340 Human pep
35	78	27.1	170 4	Abm74077 DNA clone
36	77.5	26.9	192 7	ADM04085 Human pro
37	77	26.7	170 7	Aao1099 Human pol
38	76.5	26.6	85 2	AAY11809 Human 5'
39	76.5	26.6	710 5	ABB91536 Herbicida
40	75	26.0	286 4	ABG19317 Novel hum
41	74.5	25.9	326 8	Adn9906 Bacterial
42	74.5	25.9	772 5	ADR32244 Human tum
43	74	25.7	1526 6	ABO14750 Novel hum
44	74	25.7	682 7	ADC31490 Human nov
45	74	25.7	710 7	ADB65248 Human pro

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing first 45 summaries

Database : A\_Geneseq\_15pec04:\*

1: geneseq1980s:\*

2: geneseq2-1990s:\*

3: geneseq2000s:\*

4: geneseq2001s:\*

5: geneseq2002s:\*

6: geneseq2003ab:\*

7: geneseq2003be:\*

8: geneseq2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

RESULT 1

AAR78668

standard; protein; 58 AA.

XX

AC AAR78668;

XX

DT 11-APR-1996 (first entry)

XX

DB CD7 transmembrane domain.

XX

KW human immunodeficiency virus; adoptive immunotherapy; CD7.

XX

OS Homo sapiens.

XX

PN W09521528-A1.

XX

PD 17-AUG-1995.

XX

PP 12-JAN-1995; 95WO-US000454.

XX

PR 14-FEB-1994; 94US-00195395.

XX

PA (GEHO ) GEN HOSPITAL CORP.

XX

PI Seed B, Banapur B, Romeo C, Kolanus W;

XX

DR WPI; 1995-292893/38.

DR N-PSDB; AAQ96102.

XX

PT Target cytolysis of HIV-infected cells - by chimeric CD4 receptor-bearing cells.

XX

PS Claim 3; Fig 26; 118pp; English.

XX

The CD7 transmembrane domain (AAR78668) is used in the construction of a chimeric receptor utilised in the targeted cytolysis of HIV-infected cells. The chimeric receptor comprises the extracellular domain (pref. amino acids 1-394 or 1-200) of CD4 linked via the CD7 transmembrane domain to an intracellular portion, e.g. of T-cell receptor protein zeta.

CC The CD7 portion of the chimeric receptor is encoded by the DNA sequence given in AAQ96102.

CC Sequence 58 AA;

Query Match 100.0%; Score 288; DB 2; Length 58;

Pred. No. 8.5e-22;

Page 1

### RESULT 3

XX	AC	AAW80443;
XX	DT	25-MAR-2003 (revised)
DT	DT	30-OCT-1996 (first entry)
XX	DB	Human CD7 antigen.
XX	KW	Cell surface antigen; cloning; immunoselection; immunotherapy; therapy; diagnosis; vector; piH3; CD7; COS; T-lymphocyte.
XX	KW	Lymphoblastic leukaemia.
OS	OS	Homo sapiens.
XX	PH	Location/Qualifiers
PH	Key	
PT	Peptide	1. .27 /label= Sig_peptide
PT	Modified-site	45. .47 /label= N-glycosylation_site
PT	Modified-site	95. .98 /label= N-glycosylation_site
PT	Domain	181. .201 /label= Transmembrane_domain
XX	PN	US5505126-A.
XX	PD	09-APR-1996.
XX	PP	18-OCT-1993; 93US-00139273.
XX	PR	25-FEB-1988; 88US-0016016.
PR	PR	13-JUL-1989; 89US-00379076.
PR	PR	13-JUL-1990; 90US-00553159.
PR	PR	01-DEC-1992; 92US-00983647.
XX	PA	(GEHO ) GEN HOSPITAL CORP.
XX	PT	Seed B, Aruffo A;
XX	DR	WPI; 1996-200279/20.
DR	N-PSDB; AATI4708.	
XX	PT	Cloning of cDNA encoding cell surface antigen - useful for isolation of diagnostic and therapeutic proteins.
XX	PS	Example 4; Fig 8A-8B; 79pp; English.
XX	CC	The amino acid sequence (AATI434) of CD7, a cell surface antigen associated with human T-cells, was deduced from a cDNA clone (AATI4708) derived from human T-cell tumour HPP-B-ALL cells. CD7 was expressed in COS cells following construction of a cDNA library utilising vector piH3 (See also AATI402) and panning of the library using antibody-coated plates. The physiological role of CD7 is unclear. CD7 was demonstrated not to be an IgM receptor. Using the novel immunoselection cloning method, cell surface antigens (see also AATI431-46) can be obtained for diagnostic and therapeutic use in cases of immune-associated disease, and for identification, isolation and purification of antibodies and antigens. (Updated on 25-MAR-2003 to correct PF field.)
XX	SQ	Sequence 240 AA;
Query Match	1	98.6%; Score 284; DB 2; Length 240;
Best Local Similarity	98.3%; 1; Mismatches 0; Indels 0; Gaps 0;	
Matches	57;	Conservative
Qy	1	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARR 58
Db	147	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARTQ 204
Query Match	1	98.6%; Score 284; DB 2; Length 240;
Best Local Similarity	98.3%; 1; Mismatches 0; Indels 0; Gaps 0;	
Matches	57;	Conservative
Qy	1	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARR 58
Db	147	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARTQ 204
AC	AAW80443;	
XX	DT	25-MAR-2003 (revised)
DT	DT	07-JUN-1999 (first entry)
XX	DB	Human CD7 antigen.
XX	KW	CD7; cell surface antigen; human; lymphocyte; cloning; lymphoblastic leukaemia.
XX	KW	Lymphoblastic leukaemia.
OS	OS	Homo sapiens.
XX	PH	Location/Qualifiers
PH	Key	
PT	Modified-site	45. .47 /note= "Arg is N-glycosylated"
PT	Modified-site	96. .98 /note= "Asn is N-glycosylated"
PT	Domain	181. .201 /note= "transmembrane domain"
PT	Modified-site	198 /note= "potential fatty acid esterification site"
XX	PN	US5830731-A.
XX	PD	03-NOV-1998.
XX	PP	21-MAY-1997; 97US-00861205.
XX	PR	25-FEB-1988; 88US-0016416.
PR	PR	13-JUL-1989; 89US-00379076.
PR	PR	23-MAR-1990; 90US-00498809.
PR	PR	13-JUL-1990; 90US-00553759.
PR	PR	01-DEC-1992; 92US-00983647.
XX	PA	(GEHO ) GEN HOSPITAL CORP.
XX	PT	Seed B, Aruffo A;
XX	DR	WPI; 1998-609251/51.
DR	N-PSDB; AAV63446.	
XX	PT	New cloning vector and poly:linker - based on existing sequences for PT efficient cloning and expression of mammalian cDNA(s), especially human PT lymphocyte antigenic sequences.
XX	PS	Example 4; Fig 8A-B; 75pp; English.
XX	CC	This polypeptide comprises human CD7 antigen. Its amino acid sequence was deduced from the nucleotide sequence (see AAV81204) of a cDNA clone isolated from HPP-B-ALL T-cell tumour cells using a novel method for cloning cDNAs from mammalian expression libraries. The method is based on transient expression of an antigen in eukaryotic cells and physical selection of cells expressing the antigen by adhesion to an antibody-coated substrate. It is useful for the isolation and cloning of any protein which can be expressed and transported to the cell surface membrane of a eukaryotic cell, and has been used to clone genes (see AAV63442-63) encoding cell surface antigens from mammalian lymphocytes (see AAW80440-55). CD7, a marker for the identification of T cell acute lymphoblastic leukaemia, has been expressed in COS cells. The purified genes and proteins are useful for immunodiagnostic and immunotherapeutic applications, including the diagnosis and treatment of immune-mediated infections, diseases, and disorders of animals, including humans. (Updated on 25-MAR-2003 to correct PR field.)
XX	SQ	Sequence 240 AA;
Query Match	1	98.6%; Score 284; DB 2; Length 240;
Best Local Similarity	98.3%; 1; Mismatches 0; Indels 0; Gaps 0;	
Matches	57;	Conservative
Qy	1	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARR 58
Db	147	PRASALPAPPTPSALPDQQTASALPDPPAASALPAALAVISFLGLGLGVACVLARTQ 204



CC infections, diseases, and disorders in animals, including humans. These  
 CC disorders include asthma, immune-complex disease, amyloidosis, parasitic  
 CC diseases or multiple sclerosis  
 XX sequence 240 AA;

Query Match 98.6%; Score 284; DB 3; Length 240;  
 Best Local Similarity 98.3%; Pred. No. 9\_3e-21;  
 Matches 57; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
 CC 1 PRASALPAPPTGSALPDPTASALPDPPASALPAALAVISFLIGLGLGIVACVLRTR 58  
 CC 147 PRASALPAPPTGSALPDPTASALPDPPASALPAALAVISFLIGLGLGIVACVLRTR 204

RESULT 8  
 AAU02438  
 ID AAU02438 standard; protein; 240 AA.  
 XX  
 AC AAU02438;  
 XX  
 DT 09-SEP-2004 (revised)  
 DT 29-AUG-2001 (first entry)  
 XX  
 DE Human lymphocyte cell surface antigen; immune-mediated disease; CD7;  
 KW infection; immune deficiency disorder; hypersensitivity; inflammation;  
 KW systemic lupus erythematosus; platelet disorder; rheumatoid arthritis;  
 KW transplant rejection; asthma.  
 XX  
 OS Homo sapiens.  
 OS Unidentified.  
 XX  
 FH Key  
 FT Location/Qualifiers  
 FT Modified-site 45..47 /note= "Asn is glycosylated"  
 FT 96..98 /note= "Asn is glycosylated"  
 FT Domain 181..201 /label = Transmembrane\_domain  
 FT Modified-site 198 /note= "Patty acid esterification site"  
 XX  
 US6218525-B1.  
 XX  
 PD 17-APR-2001.  
 XX  
 PR 01-DEC-1992; 92US-00983647.  
 XX  
 PR 25-FEB-1988; 88US-00160416.  
 PR 13-JUL-1989; 89US-00379076.  
 PR 13-JUL-1990; 90US-00553759.  
 XX  
 PA (GEHO ) GEN HOSPITAL CORP.  
 PT Seed B, Aruffo A, Simmons D;  
 XX  
 DR WPI; 2001-389848/30.  
 DR N-PSDB; AAC03176.  
 XX  
 PT New recombinant DNA encoding CD28 useful for diagnosing and treating  
 PT immune-mediated diseases, infections or disorders, e.g. systemic lupus  
 PT erythematosus, asthma, transplant rejection, rheumatoid arthritis.  
 XX  
 PS Example 4; Fig 8A-8B; 72pp; English.

XX  
 CC The present sequence representing human lymphocyte cell surface antigen  
 CC CD7 is 1 of various human lymphocyte cell surface antigen polypeptide  
 CC sequences (AAU02435-AAU02452) described in the present invention. The  
 CC invention relates to a novel method of cloning cDNA encoding cell surface  
 CC antigens and efficient construction of cDNA libraries. Also described are  
 CC 2 expression vectors (AAS03171, AAS03174) which provide high level

CC expression in eukaryotic host cells. A genetically engineered cDNA  
 CC sequence encoding the CD28 amino acid extracellular domain sequence  
 CC (amino acids 1-134 given in AAU02437) and/or comprising nucleotides 100-  
 CC 759, 154-555 or 154-759 of the CD28 cDNA sequence (RAS0175) is also new.  
 The purified genes and proteins are useful for immunodiagnostic and  
 CC immunotherapeutic applications, such as in the diagnosis and treatment of  
 CC immune-mediated diseases, infections or disorders in animals and humans.  
 Such diseases include immune deficiency diseases, diseases of immediate  
 CC type of hypersensitivity, asthma, hypersensitivity pneumonitis, systemic  
 CC lupus erythematosus, rheumatoid arthritis, acute and chronic  
 CC inflammation, platelet disorders, plasma and other cell neoplasms,  
 CC parasitic diseases, multiple sclerosis, Guillain-Barre syndrome and  
 CC tissue and organ transplant rejection. The sequences can also be used to  
 CC identify, isolate and purify other antibodies and antigens  
 CC Revised record issued on 09-SEP-2004 : Correction to feature table key  
 XX  
 Sequence 240 AA;  
 ID AAB36657  
 XX  
 AC AAB36657;  
 XX  
 DT 13-MAR-2001 (first entry)  
 XX  
 DE Human CD7 protein sequence SEQ ID NO:2.  
 XX  
 PR Human; CD7; K12; cognate ligand; cluster of differentiation; cancer;  
 KW identification; inhibiting T cell proliferation; HIV; infection;  
 KW activating natural killer cell proliferation; leukaemia; Lymphoma;  
 KW Bepsi; graft versus host disease; autoimmune disease; arthritis;  
 KW multiple sclerosis; rheumatoid arthritis; psoriatic arthritis; lupus;  
 KW scleroderma; psoriasis; atopic dermatitis; type I diabetes mellitus;  
 KW Hashimoto's thyroiditis; pernicious anaemia; Addison's disease; uveitis;  
 KW myasthenia gravis; psoriasis; Guillain Barre Syndrome; Grave's disease;  
 KW systemic lupus erythematosus; dermatomyositis; asthma; eczema;  
 KW atopical dermatitis; contact dermatitis; eczematous dermatitis;  
 KW seborrhoeic dermatitis; rhinitis.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200073333-A2.  
 XX  
 PR 07-DEC-2000.  
 XX  
 PR 26-MAY-2000; 2000WO-US014612.  
 XX  
 PR 28-MAY-1999; 99US-0136450P.  
 XX  
 PA (IMMUNEX CORP.  
 XX  
 PR Lyman SD, Fanslow WC;  
 XX  
 DR WPI; 2001-061511/07.  
 DR N-PSDB; AAC08151.  
 XX  
 PR Stimulating intracellular signaling of CD7 comprises contacting a cell  
 PR expressing CD7 with recombinant K12 protein, the cognate ligand of CD7,  
 PR to inhibit T cell proliferation and/or activate natural killer cell  
 PR proliferation.  
 XX  
 PS Disclosure; Page 35-36; 42pp; English.

XX  
 CC The present invention describes a method for stimulating (S) the  
 CC intracellular signalling of CD (cluster of differentiation) 7 comprising  
 CC contacting a cell that expresses CD7 with a recombinant KL2 protein (1),  
 CC the cognate ligand of CD7. (S) is useful for inhibiting T cell  
 CC proliferation and/or activating NK (natural killer) cell proliferation  
 CC and/or inducing NK toxicity in a mammal which involves administration of  
 CC KL2 protein. It is also used for treating HIV-1 infection, cancer (T cell  
 CC leukaemia, acute lymphom, leukaemia, cutaneous T cell lymphoma),  
 CC bacterial and viral infections, mediated by CD7. In the case of treating  
 CC T cell leukaemia the soluble KL2 protein is covalently attached to a  
 CC toxin. A disease mediated by CD7 such as sepsis, graft versus host  
 disease due to transplantation, autoimmune diseases, multiple sclerosis,  
 CC arthritis, rheumatoid arthritis, psoriatic arthritis, scleroderma, lupus,  
 CC psoriasis, atopic dermatitis, type I diabetes mellitus, Hashimoto's  
 CC thyroiditis, pernicious anaemia, Addison's disease, myasthenia gravis,  
 CC uveitis, psoriasis, Guillain-Barre Syndrome, Graves' disease, systemic  
 CC lupus, erythematosus and dermatomyositis, asthma, eczema, atopic  
 CC dermatitis, contact dermatitis, other eczematous dermatides, seborrhoeic  
 CC dermatitis, and rhinitis is also treated by administering a KL2  
 CC antagonist (neutralising antibody). The present sequence represents the  
 CC human CD7 protein, which is given in the exemplification of the present  
 CC invention

XX  
 SQ sequence 240 AA;

Query Match 98.6%; Score 284; DB 4; Length 240;  
 Best Local Similarity 98.3%; Pred. No. 9.3e-21; 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PRASALPAPPTPSALPDQTAALPDPPAASALPAALAVISPLIGLIGVACVLARTR 58  
 Db 147 PRASALPAPPTPSALPDQTAALPDPPAASALPAALAVISPLIGLIGVACVLARTQ 204

RESULT 10

ADO49346  
 ID ADO49346 standard; protein: 240 AA.  
 XX  
 AC ADO49346;  
 XX  
 DT 15-JUN-2004 (first entry)

XX  
 DE Human CD7 antigen.  
 XX  
 KW cell surface antigen; immune-mediated disorder; asthma;  
 KW rheumatoid arthritis; multiple sclerosis; vasculitis; inflammation;  
 KW human.  
 OS Homo sapiens.  
 XX  
 PN US20040722B3-A1.  
 XX  
 PD 15-APR-2004.

XX  
 PF 17-APR-2001; 2001US-00836544.  
 XX  
 PR 25-FEB-1988; 88US-00160316.  
 PR 23-MAR-1990; 90US-00498809.  
 PR 13-JUL-1990; 90US-00553759.  
 PR 01-DEC-1992; 92US-00983647.

(SEED/) SEED B.

(ALLE/) ALLEN J.  
 PA (ARUFF/) ARUFFO A.  
 PA (CAME/) CAMERINI D.  
 PA (LAUF/) LAUFER L.  
 PA (OQUE/) OQUENDO C.  
 PA (SIMM/) SIMMONS D.  
 PA (STAM/) STAMENKOVIC I.  
 PA (STEN/) STENGELIN S.  
 PA (AMIO/) AMIOT M.

XX  
 PI Seed B, Allen J, Aruffo A, Camerini D, Lauffer L, Oquendo C;  
 PI Simmons D, Stamenkovic I, Stengelin S, Amiot M;  
 XX  
 DR WPI: 2004-328571/30.

XX  
 DR N-PSDB; ADO49345.

XX  
 PT New cloning cDNA segments encoding cell surface antigens of human  
 PT lymphocytes, useful in diagnosing and treating asthma, rheumatoid  
 PT arthritis, multiple sclerosis, vasculitis and inflammation and  
 PT infections.

XX  
 PS Claim 2; FIG 8; 75P; English.

XX  
 The invention relates to a cloned cDNA segment encoding a cell surface  
 CC antigen selected from CD1a, CD1b, CD1c, CD2, CD6, CD7, CD3, CD14, CD16,  
 CC CD19, CD20, CD22, CD27, CD31, CD29, CD29a, CD29b, CD33, CD34, CD36,  
 CC CD37, CD38, CD39, CD46, CD24, CD31, and their functional derivatives, the cell  
 CC surface antigens of human lymphocytes prepared from the cDNAs are useful  
 CC in diagnostic and therapeutic utility in immune-mediated disorders  
 CC (asthma, rheumatoid arthritis, multiple sclerosis, vasculitis and  
 CC inflammation) and infections in mammals, including humans. The present  
 CC sequence represents the amino acid sequence of a human cell surface  
 CC antigen.

XX  
 SQ sequence 240 AA;  
 Query Match 98.6%; Score 284; DB 8; Length 240;  
 Best Local Similarity 98.3%; Pred. No. 9.3e-21; 1; Mismatches 0; Indels 0; Gaps 0;  
 Matches 57; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PRASALPAPPTPSALPDQTAALPDPPAASALPAALAVISPLIGLIGVACVLARTR 58  
 Db 147 PRASALPAPPTPSALPDQTAALPDPPAASALPAALAVISPLIGLIGVACVLARTQ 204

RESULT 11

ADP55090  
 ID ADP55090 standard; protein: 240 AA.  
 XX  
 AC ADP55090;  
 XX  
 DT 18-NOV-2004 (first entry)

XX  
 DE Human PRO protein sequence SEQ ID NO:1066.

XX  
 KW human; PRO; immune related disease; inflammatory immune response;  
 KW immune response stimulation; antiinflammatory; antinaemic; antiarthritic;  
 KW antisthmatic; antidiabetic; antiinflammatory; antipsoriatic;  
 KW antirheumatic; antithyroid; CNS; dermatological; Gastrointestinal;  
 KW haemostatic; hepatotoxic; immunomodulatory; immunosuppressive; muscular;  
 KW nephrotoxic; neuroprotective; osteopathic; respiratory; vasotropic;  
 KW virucide; gene therapy.  
 XX  
 OS Homo sapiens.

XX  
 PF WO2004039956-A2.  
 XX  
 PR 13-MAY-2004.

XX  
 PR 28-OCT-2003; 2003WO-US034381.

XX  
 PR 29-OCT-2002; 2002US-0422472P.

XX  
 PA (GETH) GENENTECH INC.

XX  
 PI Aggarwal S, Clark H, Gurney AL, Schoenfeld J, Williams PM;  
 PI Wood WI, Wu TD;

XX  
 DR WPI: 2004-376182/35.

XX  
 DR N-PSDB; ADP55089.

XX  
 PT New PRO polynucleotides and polypeptides, useful in useful in diagnosing

PT	stimulating an immune response.
PS	Claim 1; SEQ ID NO 1066; 3009pp; English.
XX	The present invention describes an isolated PRO nucleic acid (1). Also described: (1) a vector comprising (1); (2) a host cell comprising the vector of (1), (3) a process for producing a PRO polypeptides; (4) an isolated PRO polypeptide; (5) a chimeric molecule comprising the polypeptide of (4) fused to a heterologous amino acid sequence; (6) an antibody which specifically binds to a polypeptide of (4); (7) a composition of matter comprising a polypeptide of (4), (7) a agonist or antagonist of the polypeptide or an antibody that binds to the polypeptide in combination with a carrier; (8) an article of manufacture comprising a container, a label on the container and a composition of matter of (7); (9) a method of treating an immune related disease in a mammal; (10) a method for determining the presence of a PRO polypeptide in a sample suspected of having the polypeptide; (11) a method of diagnosing an immune related disease or an inflammatory response in mammal; (12) a method of identifying a compound that inhibits or mimics the activity of or expression of a gene encoding a PRO polypeptide; and (13) a method of stimulating the immune response in a mammal. The PRO sequences have antiallergic, antianæmic, antiarthritic, antidiabetic, antiinflammatory, antidiabetic, antiinflammatory, antiinflammatory, antidiabetic, CNS, dermatological, gastrointestinal, haemostatic, hepatotropic, immunomodulant, immunosuppressive, muscular, nephrotoxic, neuroprotective, osteopathic, respiratory, vasotropc and viricide activities, and can be used in gene therapy. The nucleic acid (1) and the encoded polypeptides, compositions, kits and methods are useful in diagnosing and treating an immune related disease and in stimulating an immune response. The present sequence represents a human PRO protein from the present invention.
SQ	Sequence 240 AA;
Query Match	98 6%: Score 284; DB 8; Length 240;
Best Local Similarity	98 3%: Pred. No. 9.3e-21; 0; Indels 0; Gaps
Matches	57; Conservative 1; Mismatches
QY	1 PRASLPPAPTGSAIPDPQTASALDPDPAASALPAALAVISFLUGLGIGVACVLRTR 58
Db	147 PRASLPPAPGSAIPDPQTASALDPDPAASALPAALAVISFLUGLGIGVACVLRQ 204
RESULT 12	
AD160167	
ID	AD160167 standard; protein; 250 AA.
XX	
AC	AD160167;
DT	15-APR-2004 (first entry)
DB	Secreted polypeptide #51.
XX	
KW	osteo pathic; vulnerary; cytotoxic; gene therapy; diagnosis; forensics; gene mapping; mutation identification; biodiversity; chromosome marker; immune response; myeloid cell disorder; lymphoid cell disorder; bone cartilage; tendon; ligament; nerve tissue growth; wound healing; burns; incision; ulcer; cancer.
XX	
OS	Homo sapiens.
PN	WO2003025142-A2.
XX	
PP	18-SEP-2002; 2002WO-US029636.
PD	27-MAR-2003.
XX	
PR	18-SEP-2001; 2001US-0323349P.
PR	16-SEP-2002; 2002US-00323349.
XX	
PA	(HVSSE) HYSEQ INC.

PI	Tang YT, Asundi V, Goodrich RW, Ren P, Zhang J, Zhao QA, Wang J;
XX	Ghosh M, Xue AJ, Wehrman T, Weng G, Zhou P, Dmanac RT;
XX	WPI; 2003-354601/33.
DR	N-PDB; ADI60512.
XX	<b>New polynucleotides and secreted proteins, useful for treating myeloid or lymphoid cell disorders, in bone cartilage, tendon, ligament and nerve tissue growth or regeneration, in wound healing, and in tissue repair and replacement.</b>
PS	Claim 20; SEQ ID NO 202; 243pp; English.
XX	The invention relates to novel isolated polynucleotides or a sequence encoding a polypeptide with biological activity, where the polynucleotide hybridizes to the polynucleotide under stringent hybridization conditions or has greater than 99% sequence identity with the polynucleotide. The polynucleotides and polypeptides are useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders and other traits, to assess biodiversity, as nutritional sources or supplements. The polynucleotides may also be used as molecular weight markers, chromosome markers or map related gene positions, or as an antigen to raise anti-DNA antibodies or elicit immune response. The polypeptides are useful for raising antibodies, as markers for tissues in which the corresponding polypeptide is expressed, for re-engineering damaged or diseased tissues, for treating myeloid or lymphoid cell disorders, in bone cartilage, tendon, ligament and/or nerve tissue growth or regeneration, in wound healing, in tissue repair and replacement, in healing of burns, incisions and ulcers, and in treating cancer. This sequence corresponds to a protein sequence of the invention.
SQ	Sequence 250 AA;
XX	Query Match 98.6%; Score 284; DB 7; Length 250; Best Local Similarity 98.3%; Pred. No. 9.7e-21; Matches 57; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY	1 PRASALPAPPGSALPDQPTASALPDPPAASALPAALAVIPLFLGLIGLGVACVRLTR 58
DB	157 PRASALPAPPGSALPDQPTASALPDPPAASALPAALAVIPLFLGLIGLGVACVRLTR 214
RESULT 13	
ADS11080	
ID	ADS11080 standard; protein; 225 AA.
XX	
AC	ADS11080;
XX	
DT	16-DEC-2004 (first entry)
XX	
DR	Human therapeutic protein - SEQ ID 1317.
XX	
KW	antinflammatory; neuroprotective; antianaemic; cytostatic; pulmonary; inflammatory; haematopoiesis; immunity; neurodegenerative; stem cell; aplastic anaemia; cancer; wound healing; gene therapy.
KW	
OS	Homo sapiens.
XX	
PN	WO2004080148-A2.
XX	
PD	23-SEP-2004.
XX	
PP	30-SEP-2003; 2003WO-US030720.
XX	
PR	02-OCT-2002; 2002US-0416186P.
XX	
PA	(NUV-E-) NUVETO INC.
PA	
PI	Tang YT, Asundi V, Ren F, Zhang J, Wehrman T, Wang Z, Ma Y; Wang D, Chen R, Zhao QA, Wang J, Ghosh M, Xue AJ, Weng G, Zhou P;
XX	
WPI	2004-668857/65.

DR N-PSDB; ADSI0396.

XX New polynucleotide, useful in preparing a composition for diagnosing or  
PT treating inflammatory, neurodegenerative or stem cell disorders, e.g.,  
PT aplastic anemia or cancer for promoting wound healing.

XX Claim 20; SEQ ID NO 1317; 71pp; English.

CC The invention relates to a novel isolated polynucleotide and the encoded  
CC polypeptide. The molecules of the invention demonstrate antiinflammatory,  
CC neuroprotective, antiangiogenic, cytostatic and vulnerary activities and may  
CC be useful in preparing a composition for diagnosing or treating  
CC inflammatory, haematopoietic, immune, neurodegenerative or stem cell  
CC disorders, such as aplastic anaemia or cancer, as well as for promoting  
CC wound healing. The molecules may also be utilised during gene therapy  
procedures. The current sequence is that of a human therapeutic protein  
CC of the invention. The current sequence is not shown explicitly within the  
CC specification but can be accessed from the WIPO web-site.

XX Sequence 225 AA;

Query Match 67.0%; Score 193; DB 8; Length 225;  
Best Local Similarity 82.4%; Pred. No. 1.3e-11; Mismatches 1; Indels 6; Gaps 1;  
Matches 42; Conservative 1;

Qy 8 APPRGASALPDPTQASALPDPPASALPAALAVISFLIGLIGLGVACVRLTR 58  
Db 145 APPRASALP---ALPDPPASALPAALAVISFLIGLIGLGVACVRLTQ 189

RESULT 14

AAW35850 ID AAW35850 standard; protein; 154 AA.

XX AC AAW35850;

XX DT 27-APR-1998 (first entry)

XX Human CD7 for use in T lymphocyte veto molecule.

XX Human; CD7; T lymphocyte veto molecule; chimeric molecule;  
KW targeting polypeptide; suppression; immune response; treatment;  
KW autoimmune disease; allergy; immunological disorder;  
KW transplant rejection.

XX Homo sapiens.

PN WO9737687-A1.

XX 16-OCT-1997.

XX 10-APR-1997; 97WO-US005943.

XX 10-APR-1996; 96US3-00630172.

PR (NAJ-B-) NAT JEWISH CENT IMMUNOLOGY & RESPIRATORY.

PI Staerz UD;

DR WPI; 1997-512419/47.

XX T lymphocyte veto molecule comprising response cell activating protein -  
PT limited to molecule that targets stimulator cell marker, used for  
PT selective suppression of immune response, e.g. prevention of graft  
PT rejection or treatment of auto-immune disease.

XX Claim 37; Page 60; 309pp; English.

CC A novel T lymphocyte veto molecule comprising a  
CC protein, e.g. the present sequence, linked to a targeting polypeptide  
CC that binds a molecule, which differentiates a host cell from a tissue  
CC graft cell, or selectively targets a stimulator cell involved in the  
CC autoimmune response. A veto molecule, in which the protein binds a

CC molecule that targets stimulator cells, can be used to suppress an immune  
CC response and therefore treat autoimmune diseases, e.g. systemic lupus  
CC erythematosus, myasthenia gravis, rheumatoid arthritis, insulin dependent  
CC diabetes mellitus, multiple sclerosis, celiac disease, autoimmune  
CC thyroiditis, Addison's or Graves' diseases and rheumatoid arthritis.  
CC Where the protein binds a  
CC molecule that differentiates graft and host cells, the veto molecule can  
CC be used to reduce transplant rejection. The veto molecule provides  
CC specific regulation of particular stimulator cells that can kill graft  
CC cells or respond to autoantigens, but leave other stimulator cells  
CC unaffected, e.g. CD4 or CD8 positive cells can be regulated without one  
CC affecting the other. The veto molecule can be administered locally to  
CC minimise generalised immunosuppression.

XX Sequence 154 AA;

Query Match 61.1%; Score 176; DB 2; Length 154;  
Best Local Similarity 100.0%; Pred. No. 4.6e-10; Mismatches 0; Indels 0; Gaps 0;  
Matches 34; Conservative 1;

Qy 1 PRASALDAPPGASALPDPTQASALPDPPASALP 34  
Db 121 PRASALDAPPGASALPDPTQASALPDPPASALP 154

RESULT 15

ABB71046 ID ABB71046 standard; protein; 145 AA.

XX AC ABB71046;

XX DT 26-MAR-2002 (first entry)

XX Drosophila melanogaster polypeptide SEQ ID NO 39930.

XX KW Drosophila; developmental biology; cell signalling; insecticide;  
KW pharmaceutical.

XX OS Drosophila melanogaster.

XX PN WO200171042-A2.

XX PD 27-SEP-2001.

XX PR 23-MAR-2001; 2001WO-US009231.

XX PR 23-MAR-2000; 2000US-0191637P.

PR 11-JUL-2000; 2000US-00614150.

XX PA (PBKE ) PE CORP NY.

XX Venter JC, Adams M, Li PWD, Myers EW;

XX DR WPI; 2001-656860/75.

DR N-PSDB; ABL15149.

XX New isolated nucleic acid detection reagent for detecting 1000 or more  
PT genes from Drosophila and for elucidating cell signaling and cell-cell  
PT interactions.

XX Disclosure; SEQ ID NO 39930; 21pp + Sequence Listing; English.

PS The invention relates to an isolated nucleic acid detection reagent  
CC capable of detecting 1000 or more genes from Drosophila. The invention is  
PT useful in developmental biology and in elucidating cell signalling and  
CC cell-cell interactions in higher eukaryotes for the development of  
CC insecticides, therapeutics and pharmaceutical drugs. The invention  
CC discloses genomic DNA sequences (ABU176-ABU3011), expressed DNA  
CC sequences (ABU0180-ABU1615) and the encoded proteins (ABB57737-  
CC ABB2072). The sequence data for this patent did not form part of the  
CC printed specification, but was obtained in electronic format directly  
CC from WIPO at [ftp.wipo.int/pub/published\\_pct\\_sequences](http://ftp.wipo.int/pub/published_pct_sequences)

SQ Sequence 145 AA;

Query Match 29.0%; Score 83.5; DB 4; Length 145;  
Best Local Similarity 44.1%; Pred. No. 0.91; Mismatches 5;  
Matches 26; Conservative 5; Indels 7; Gaps 4;

QY 4 SALPAPPT-GSALPPQQTASALPDPAS-ALPPALAV ISPLIGLGLQAVCULART 57  
Db 33 SAATAPTPASGATPSPSTS--PNPPAVGGGLPMLTICIGLGLGMGIVSRURRT 89

Search completed: March 7, 2005, 07:13:05  
Job time : 26.49 secB

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